

# **Stormwater Management Program (SWMP)**

**TOWN OF STRATHAM**

**Permit Year 2**

EPA NPDES Permit Number NHR041000

# Certification

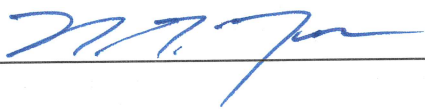
## Authorized Representative:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name

David Moore, Town Administrator

Signature



Date

9/25/2020

# **Background**

## **Stormwater Regulation**

The Stormwater Phase II Final Rule was promulgated in 1999 and was the next step after the 1987 Phase I Rule in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule all MS4s with stormwater discharges from Census designated Urbanized Area are required to seek NPDES permit coverage for those stormwater discharges.

## **Permit Program Background**

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (2003 small MS4 permit) consistent with the Phase II rule. The 2003 small MS4 permit covered "traditional" (i.e., cities and towns) and "non-traditional" (i.e., Federal and state agencies) MS4 Operators located in the states of Massachusetts and New Hampshire. This permit expired on May 1, 2008 but remained in effect until operators were authorized under the 2016 MS4 general permit, which became effective on July 1, 2018.

## **Stormwater Management Program (SWMP)**

The SWMP describes and details the activities and measures that will be implemented to meet the terms and conditions of the permit. The SWMP accurately describes the permittees plans and activities. The document should be updated and/or modified during the permit term as the permittee's activities are modified, changed or updated to meet permit conditions during the permit term. The main elements of the stormwater management program are (1) a public education program in order to affect public behavior causing stormwater pollution, (2) an opportunity for the public to participate and provide comments on the stormwater program (3) a program to effectively find and eliminate illicit discharges within the MS4 (4) a program to effectively control construction site stormwater discharges to the MS4 (5) a program to ensure that stormwater from development projects entering the MS4 is adequately controlled by the construction of stormwater controls, and (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

## **Town Specific MS4 Background (optional)**

# Small MS4 Authorization

The NOI was submitted on

September 28, 2018

The NOI can be found at the following (document name or web address):

<https://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities>

Authorization to Discharge under the 2017 NH Small MS4 General Permit was granted on

June 14, 2019

The Authorization Letter can be found (document name or web address):

<https://www.strathamnh.gov/planning-board/files/2019-ms4-epa-authorization>



# Stormwater Management Program Team

## SWMP Team Coordinator:

Position/Title:	Name	David Moore
Town Administrator	Department	Administration
	Phone Number	603-772-7391 *181
	Email Address	<a href="mailto:dmoore@strathamnh.gov">dmoore@strathamnh.gov</a>

## SWMP Team:

Position/Title:	Name	Tavis Austin, AICP
Town Planner	Department	Planning
	Phone Number	603-772-7391 *147
	Email Address	<a href="mailto:taustin@strathamnh.gov">taustin@strathamnh.gov</a>

Position/Title:	Name	Nathanial Mears
Director	Department	Public Works
	Phone Number	603-772 5550
	Email Address	<a href="mailto:nmears@strathamnh.gov">nmears@strathamnh.gov</a>

Position/Title:	Name	
	Department	
	Phone Number	
	Email Address	

Position/Title:	Name	
	Department	
	Phone Number	
	Email Address	

## **Receiving Waters**

The list of receiving waters, impairments and number of outfalls discharging to each waterbody segment has been included in the Notice of Intent.

## **Eligibility: Endangered Species and Historic Properties**

Endangered Species and Historic Properties eligibility information has been included in the Notice of Intent.

**MCM 1**  
**Public Education and Outreach**  
Permit Part 2.3.2

## Year 2 Activities

### **BMP: Grass and Fertilizer**

**Document Name and/or Web Address:**

Green Grass & Clear Water Brochure: [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54).

**Description:**

Distribution and promotion of four- fold flyer produced by UNH Cooperative Extension and NH Sea Grant outlining simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings.

**Targeted Audience:**

Residential &/or Business and Institutions

**Measurable Goal(s):**

Lawn care enthusiasts' residents understand the potential water quality impacts from fertilizer and improper disposal of grass clippings and are aware of the proper lawn care management techniques for reducing those impacts. Measurement includes materials distribution methods and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages.

200 fliers produced and distributed from various public locations within Town. Of the 50 fliers made available at Municipal Center. Flier content also shared via multiple social media sources and presented on posters for Municipal Center patrons.

Assessment of goals will be discussed in greater detail in year 3, see [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54) "Minimum Control Measure 1: Public Outreach and Education" for additional information

**Message Date:**

January, March, June, 2020; 50 fliers res-stocked quarterly, as needed.

### **BMP: Petwaste Disposal**

**Document Name and/or Web Address:**

"Every Drop" post cards and flyer [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Distribution and promotion of "Every Drop" post cards or flyer with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include pledge to pick up pet waste to be made available during dog registration and other events or venues (veterinarians, dog training, groomers, etc.). Every Drop is a collaborative education effort with

PREP, NHDES and other partners.

**Targeted Audience:**

Residents - Pet Owners

**Measurable Goal(s):**

Dog owners and/or dog walkers are aware of the potential water quality impacts from pet waste, local pet waste ordinances, and how to dispose of pet waste properly. If pledges are signed, there will be an increase of dog owners committed to picking up pet waste.

200 fliers produced and distributed from various public locations within Town. 50 fliers made available at Municipal Center. Flier content also shared via multiple social media sources and presented on posters for Municipal Center patrons..

Assessment of goals will be discussed in greater detail in year 3, see [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54) "Minimum Control Measure 1: Public Outreach and Education" for additional information. ~~Plan to place fliers will~~ be placed in Town veterinary clinics years 3 in effort to increase message disbursement.

**Message Date:** Time of license renewal (April/May 2020), 50 fliers res-stocked, as needed, quarterly at Municipal Center.

**BMP: Septic System Maintenance**

**Document Name and/or Web Address:**

[https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Distribute and promote brochure or door hangers, directing to website to educate New Hampshire homeowners with septic systems on how to identify, locate and maintain those systems. Get Pumped NH is a collaborated effort between the New Hampshire Association of Septage Haulers (NHASH) and the New Hampshire Department of Environmental Services (NHDES).

**Targeted Audience:**

Septic System Owners

**Measurable Goal(s):**

Residents are aware of water quality impacts from septic systems, the importance of maintaining septic systems and how to maintain them.

150 fliers distributed from various public locations within Town. 50 fliers made available at Municipal Center. Flier content also shared via multiple social media sources and presented on posters for Municipal Center patrons.. Assessment of goals will be discussed in greater detail in year 3, see [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54) "Minimum Control Measure 1: Public Outreach and Education" for additional information. Select Board newsletter incorporated June 2020 with NHDES encouragement of private septic maintenance.

**Message Date:**  
Spring/Summer 2020 /Fall 2019

**BMP: Grass and Fertilizer**

**Document Name and/or Web Address:**

Green Grass & Clear Water Brochure: [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54).

**Description:**

Distribution and promotion of four- fold flyer produced by UNH Cooperative Extension and NH Sea Grant outlining simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings.

**Targeted Audience:** Developer/Construction

**Responsible Department/Parties:** Planning/Town Planner

**Measurable Goal(s):**

Lawn care enthusiasts' residents understand the potential water quality impacts from fertilizer and improper disposal of grass clippings and are aware of the proper lawn care management techniques for reducing those impacts. Measurement includes materials distribution methods and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages.

200 fliers produced and distributed from various public locations within Town. 50 fliers made available at Municipal Center. Flier content also shared via multiple social media sources and presented on posters for Municipal Center patrons. Developers and contractors directed to Town materials upon submission of building permit and or Land use permit applications. Messaging also included during preconstruction meetings.

Assessment of goals will be discussed in greater detail in year 3, see [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54) "Minimum Control Measure 1: Public Outreach and Education" for additional information

**Message Date:**

In accordance with NOI; 50 fliers res-stocked, as needed, quarterly to count number distributed.

**BMP: Septic System Maintenance**

**Document Name and/or Web Address:**

[https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Distribute and promote brochure or door hangers, directing to website to educate New Hampshire homeowners with septic systems on how to identify, locate and maintain

those systems. Get Pumped NH is a collaborated effort between the New Hampshire Association of Septage Haulers (NHASH) and the New Hampshire Department of Environmental Services (NHDES).

**Targeted Audience:** Developer/Construction

**Responsible Department/Parties:** Planning/Town Planner **Measurable**

**Measurable Goal(s):**

Lawn care enthusiasts' residents understand the potential water quality impacts from fertilizer and improper disposal of grass clippings and are aware of the proper lawn care management techniques for reducing those impacts. Measurement includes materials distribution methods and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages.

200 fliers produced and distributed from various public locations within Town. 50 fliers made available at Municipal Center, restocked as needed to count distribution. Flier content also shared via multiple social media sources and presented on posters for Municipal Center patrons. Developers and contractors directed to Town materials upon submission of building permit and or Land use permit applications. Messaging also included during preconstruction meetings.

Assessment of goals will be discussed in greater detail in year 3, see [https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54) "Minimum Control Measure 1: Public Outreach and Education" for additional information

**Message Date:** In accordance with NOI; 50 fliers res-stocked quarterly.

**Requirement Year 3**

**BMP: TBD**

**Description:** TBD

**Targeted Audience:** Businesses

**Responsible Department/Parties:** TBD

**Measurable Goal(s):** TBD

**Message Date:** Spring

**Requirement Year 4**

**BMP: Septic System Maintenance**

**Description:** TBD

**Targeted Audience:** Septic System Owners

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date:** TBD

**BMP: TBD**

**Description:** TBD

**Targeted Audience:** Developer/Construction

**Responsible Department/Parties:**

**Measurable Goal(s):** TBD

**Message Date:** Fall

**Requirement Year 5**

**BMP: TBD**

**Description:** TBD

**Targeted Audience:** Businesses

**Responsible Department/Parties:**

**Measurable Goal(s):** TBD

**Message Date:** Spring



**MCM 2**  
**Public Involvement and Participation**  
Permit Part 2.3.3

**BMP: Public Review of Stormwater Management Program**

**Location of Plan and/or Web Address:**

<https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

**Responsible Department/Parties:**

**Planning/Town Planner**

**Measurable Goal(s):**

Stormwater Management Plan is publicly available.

**BMP: Public Participation in Stormwater Management Program Development**

**Description:**

**Public Outreach Flier**

**Responsible Department/Parties:**

**Planning/Town Planner**

**Measurable Goal(s):**

Annual public input provided; public comments, if submitted, posted online. No comments received 2020; likely related to COVID-19 Emergency Declaration. Plan is publicly available and feedback is always appreciated.

**MCM 3**  
**Illicit Discharge Detection and  
Elimination (IDDE) Program**  
Permit Part 2.3.4

**BMP: IDDE Legal Authority**

See Illicit Discharge Detection and Elimination (IDDE) Plan

**BMP: Sanitary Sewer Overflow (SSO) Inventory**

See Illicit Discharge Detection and Elimination (IDDE) Plan

**BMP: Map of Storm Sewer System**

See Illicit Discharge Detection and Elimination (IDDE) Plan

**BMP: IDDE Program**

See Illicit Discharge Detection and Elimination (IDDE) Plan

**BMP: Employee Training**

See Illicit Discharge Detection and Elimination (IDDE) Plan

**MCM 4**  
**Construction Site Stormwater Runoff Control**  
Permit Part 2.3.5

**BMP: Sediment and Erosion Control Ordinance**

Completed (by May 1, 2008) ☐

Ordinances Link or Reference: [www.strathamnh.gov](http://www.strathamnh.gov) ; Site Plan Regulations, Addendum C

Department Responsible for Enforcement: Planning/Code Enforcement through Site Plan Regulations

**BMP: Site Plan Review Procedures**

Written procedures completed (by year 1) ☒

Document Name and/or Web Address: [www.strathamnh.gov](http://www.strathamnh.gov) ; Site Plan Regulations, Addendum C

Department Responsible for Enforcement: Planning/Code Enforcement through Site Plan Regulations

Description:

Measurable Goal(s): Conduct site plan review of 100% of projects according to the procedures outlined above. Process begins with submission of planning or building permit application.

**BMP: Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures**

Completed (by year 1) ☒

Document Name and/or Web Address: [www.strathamnh.gov](http://www.strathamnh.gov) ; Site Plan Regulations, Addendum C

Department Responsible for Enforcement: Planning/Code Enforcement through Site Plan Regulations

Description:

Measurable Goal(s): Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed.

# **MCM 5**

## **Post Construction Stormwater Management in New Development and Redevelopment**

Permit Part 2.3.6

**BMP: Post-Construction Ordinance**

Completed (by year 2) ☒

Town Ordinances Link or Reference: [www.strathamnh.gov](http://www.strathamnh.gov) ; Site Plan Regulations, Addendum C

Department Responsible for Enforcement: DPW/Code Enforcement through Site Plan Regulations

**BMP: Street Design and Parking Lot Guidelines Report**

Completed (by year 4) ☐

Document Name and/or Web Address: TBD

Department Responsible for Enforcement: TBD

Description:

Measurable Goal(s): Recommendations are implemented by year 4 with progress reported annually.

**BMP: Green Infrastructure Report**

Completed (by year 4) ☐

Document Name and/or Web Address: TBD

Department Responsible for Enforcement: TBD

Description:

Measurable Goal(s): Recommendations are implemented by year 4 with progress reported annually.

**BMP: List of Municipal Retrofit Opportunities**

Completed (by year 4) ☐

Document Name and/or Web Address:

Department Responsible for Enforcement:

Description:

Measurable Goal(s): The list is completed by year 4 and updated as needed.



**MCM 6**  
**Good Housekeeping and Pollution**  
**Prevention for Permittee Owned Operations**  
Permit Part 2.3.7

## PERMITTEE OWNED FACILITIES

### BMP: Parks and Open Spaces Operations and Maintenance Procedures

Written Document Completed (by year 2) ☐

Document Name and/or Web Address:

Process outlined in this SWMP document

Responsible Department/Parties:

Planning/Land Use Department

**Description:** Stratham has established procedures to address the proper use, storage, and disposal of pesticides, herbicides, and fertilizers (PHF) including minimizing the use of these products in accordance with manufacturer's instructions; trash management; pet waste disposal; waterfowl management; and erosion and poor vegetative cover and as outlined in Section 2.3.7.1 a. of the MS4 permit.

### **Municipal Parks and Open Space Inventory**

The following is a list of properties covered by these procedures and include all municipal and county facilities where fertilizers are stored, mixed, applied, recycled, or disposed of, and at municipal properties in which lawns or vegetation are mowed, trimmed, and maintained (e.g. parks, golf courses, and open space properties) located within the MS4 area. This inventory shall be updated annually during SWMP review.

Park/Open Space	Address/Location	Services Contracted	Lawn Mowing	Landscaping	Fertilizing	Pesticide/Herbicide	Trash mgmt.	Pet waste	Waterfowl mgmt.	Other maintenance:
Stratham Hill Park	270 Portsmouth Ave. Stratham, NH		x	x	x	x	x	x		
Stevens Park	68 Bunker Hill Ave Stratham, NH		x	x	x	x	x	x		

Responsible Department/Parties: Town of Stratham, DPW

### **Training:**

Annual maintenance procedures training will be made available to employees involved in Parks and Open Spaces operations. All contractors involved in Parks and Open Spaces operations are provided the information in this section of the SWMP.

Training video: <https://www.youtube.com/watch?v=6eD29UBINqE&feature=youtu.be>

### **Best Management Practices**

The following best management practices (BMPs) aim to minimize the concentration of nitrogen and phosphorus in stormwater runoff:

## **Lawn Maintenance**

### ***Landscape Maintenance***

- Mulch-mow grasses whenever possible; grass clippings are a natural fertilizer.
- Sweep grass clippings from sidewalks or streets back onto grassy areas.
- Dispose of organic wastes by composting whenever possible. When composting is not possible, dispose of organic wastes at an approved disposal facility. In both cases, ensure that runoff from sites does not enter a waterway.
- Do not wash down or dispose of lawn clippings, leaves, tree trimmings, or other landscape waste in a storm drain, drainage ditch, or open body of water.
- Consider landscape design that utilizes native, drought tolerant vegetation.
- Collect and dispose of wastes generated by cleaning equipment (e.g. grass clippings) in the trash or by composting.
- Irrigate with the minimal amount of water needed. Never water at rates that exceed the infiltration rate of the soil.
- Maintain all irrigation systems so that irrigation uses the minimum amount of water possible, is applied evenly, and does not run off. Repair broken or leaking sprinkler heads as soon as possible.
- Use automatic timers or computer-controlled systems on irrigation equipment to minimize runoff.

### ***Application of Fertilizers***

- Properly calibrate all fertilizer application equipment to ensure proper application rate.
- Time the application of fertilizers to coincide with the manufacturer's recommendation for best results.
- Consider using fertilizers with low or no levels of phosphorus.
- Consider use slow release fertilizers.
- Train employees on proper application methods, as recommended by the equipment manufacturer.
- Do not apply fertilizers when heavy rainfall or winds are expected.
- Never over-apply fertilizers.
- Do not apply fertilizers or pesticides in or near any drainage areas or irrigation ditches.
- Sweep or blow granular fertilizers back onto grassy areas from pavement and sidewalks.

### ***Storage and Handling of Fertilizers***

- Store and mix fertilizers inside a covered area that has an impervious (i.e. hard or paved) surface, preferably indoors, so that spills or leaks will not contact soils or waters.
- Do not handle or dispose of fertilizers, pesticides, herbicides, or fungicides in or near storm drains, irrigation ditches, or surface water.
- Dispose of excess or leftover chemicals according to the instructions on the label, preferably on the target pest, vegetated area, or as hazardous waste.

## **Trash Management**

- Routinely pick up any trash bags left along trails, parks, or streets.
- Empty trash cans and dumpsters regularly.
- Keep lids on all trash cans and dumpsters.

## **Pet Waste Cleanup**

- Post signs in areas concerning the proper disposal of pet wastes.
- Provide pet waste bags and waste containers at all parks, trailheads, and open space properties.
- Collect pet waste in a bag, and deposit it in a trashcan or dumpster.

## **Waterfowl Waste Management**

- Discourage waterfowl from living in stormwater infrastructure.

**Erosion and Poor Vegetative Cover**

- Install temporary sediment and erosion control stabilization measures as needed.
- Re-establish grass or native plants, especially within 50 ft of a surface water.

**Measurable Goal(s):** Implement the BMP's on 100% of the parks and open spaces

**BMP: Buildings and Facilities Operations and Maintenance Procedures**

**Written Document Completed** (by year 2) ☒

**Document Name and/or Web Address:**

Process outlined in this SWMP document

**Responsible Department/Parties:**

Department of Public Works

**Description:**

Evaluate the use, storage, and disposal of petroleum products and other potential stormwater pollutants. Provide employee training as necessary, ensure that Spill Prevention Plans are in place. Develop management procedures for dumpsters and other waste management equipment. Sweep lots and areas surrounding the facilities clean to reduce runoff of pollutants in accordance with Section 2.3.7.1 b. of the MS4 permit.

**Measurable Goal(s):**

Implement the SOP on 100% of buildings and facilities.

**BMP: Buildings and Facilities Operations and Maintenance Procedures****Requirements Due by Year 2**

**Description:** Evaluate the use, storage, and disposal of petroleum products and other potential stormwater pollutants. Provide employee training as necessary, ensure that Spill Prevention Plans are in place. Develop management procedures for dumpsters and other waste management equipment. Sweep lots and areas surrounding the facilities clean to reduce runoff of pollutants in accordance with Section 2.3.7.1 b. of the MS4 permit.

**Municipal Buildings and Facilities Inventory**

The following is a list of properties covered by these procedures and include all schools, municipal offices, police and fire stations, municipal pools, parking garages, etc. located within the MS4 area. This inventory shall be updated annually during SWMP review.

Building	Address/Location	Services Contracted	Trash mgmt.	Building Maintenance	Pollutant Storage	Petroleum Storage	Other maintenance:
DPW Facility	70 Bunker Hill Ave Stratham, NH		x	x	x	x	
Transfer Station	25 Union Road Stratham, NH		x	n/a	x	x	

**Responsible Department/Parties:** Town of Stratham, DPW

### **Training:**

Annual maintenance procedures training will be made available to employees involved in Municipal Building and Facilities operations. All contractors involved in Building and Facilities operations are provided the information in this section of the SWMP.

## **Best Management Practices**

The following best management practices (BMPs) will be implemented at all municipally owned or operated buildings and facilities located within the MS4 area:

### **Handling, Storage, Transfer, and Disposal of Trash and Recyclables**

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste.

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material.
- Do not locate dumpsters over or adjacent to catch basins.
- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.

### **Building Maintenance**

- Sweep parking lots and keep areas surrounding facilities clean to reduce runoff of pollutants.
- Buildings should be routinely inspected for areas of potential leaks.
- Parking lots surrounding municipal buildings and facilities should be swept and kept clean to reduce runoff of pollutants and debris to the stormwater system.

### **Storage of Petroleum Products and Potential Pollutants**

- Evaluate the use, storage and disposal of petroleum products and other potential stormwater pollutants.
- Routinely inspect buildings and facilities for areas of potential discharges or leaks.

### **Spill Response**

- Ensure that spill prevention plans are in place (these should be included for maintenance garages, public works yards, transfer stations and other waste handling facilities see individual SWPPPs).
- Notify the facility's supervisor immediately and ensure that other staff and/or members of the public are aware of the spill and removed from the spill area as appropriate.
- Coordinate with fire department as necessary.
- For large oil spills, NHDES Petroleum Spill Response program will be notified immediately at (603) 271-3644 and an emergency response contractor would be called in.

- Materials and equipment necessary for spill cleanup may include but are not limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for the purpose.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency as required by State and Local regulations.
- With proper training and personal protective equipment, complete the following:
  - Stop the contaminant release;
  - Contain the contaminant release through the use of spill containment berms or absorbents;
  - Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers;
  - Clean up the spill;
  - Dispose of all contaminated products in accordance with applicable federal, state and local regulations.

**Measurable Goal(s):** Implement the BMP's on 100% of buildings and facilities.

**Measurable Goal(s):** Implement the SOP on 100% of the parks and open spaces.

### **BMP: Buildings and Facilities Operations and Maintenance Procedures**

**Written Document Completed (by year 2)** ☒

**Document Name and/or Web Address:**

Process outlined in this SWMP document

**Responsible Department/Parties:**

Department of Public Works

**Description:**

Evaluate the use, storage, and disposal of petroleum products and other potential stormwater pollutants. Provide employee training as necessary, ensure that Spill Prevention Plans are in place. Develop management procedures for dumpsters and other waste management equipment. Sweep lots and areas surrounding the facilities clean to reduce runoff of pollutants in accordance with Section 2.3.7.1 b. of the MS4 permit.

**Measurable Goal(s):**

Implement the SOP on 100% of buildings and facilities.

### **BMP: Vehicles and Equipment Operations and Maintenance Procedures**

**Written Document Completed (by year 2)** ☒

**Document Name and/or Web Address:**

Process outlined in this SWMP document

**Responsible Department/Parties:**

Department of Public Works

**Description:**

Establish procedures for the storage of permittee vehicles. Vehicles with fluid leaks shall be stored indoors of containment shall be provided. Evaluate fueling areas owned by the permittee or used by permittee vehicles. Establish procedures to ensure that vehicle wash waters are not discharged to municipal storm drains or surface waters.

**Measurable Goal(s):**

Implement the SOP on 100% of vehicles and equipment.

## INFRASTRUCTURE

### BMP: Catch Basin Cleaning Program

Written Document Completed (by year 1) ☒

Document Name and/or Web Address:

Responsible Department/Parties:

#### **Description:**

The Stratham DPW performs routine inspections, cleaning, and maintenance of the approximately 15 catch basins that are located within the MS4 regulated area. The Town of Stratham will implement the following catch basin inspection and cleaning procedures to reduce the discharge of pollutants from the MS4.

- Routine inspection and cleaning of catch basins. Catch basins should be cleaned such that they are no more than 50 percent full at any time. The Town of Stratham will initially inspect all catch basins within the regulated area within two (2) years of the effective date of the permit to evaluate sediment or debris accumulation and establish optimal inspection and maintenance frequencies to meet the "50 percent" goal.
- If a catch basin sump is more than 50 percent full during two consecutive routine inspections or cleaning events, the finding will be documented, the contributing drainage area will be investigated for sources of excessive sediment loading, and to the extent practicable, contributing sources will be addressed. If no contributing sources are found, the inspection and cleaning frequency will be increased.
- Catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) will be inspected and cleaned more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings (i.e., catch basins more than 50 percent full). Priority will also be given to catch basins that discharge to impaired waters.
- The following information will be included in each annual report:
  - Any action taken in response to excessive sediment or debris loadings
  - Total number of catch basins
  - Number of catch basins inspected
  - Number of catch basins cleaned
  - Total volume or mass of material removed from catch basins.

#### **Measurable Goal(s):**

All catch basins are cleaned in accordance to the document above such that no catch basin is more than 50% full at any given time.

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### **BMP: Street Sweeping Program**

**Written Document Completed** (by year 1) ☒

**Document Name and/or Web Address:**

Process is outlined in this SWMP document.

**Responsible Department/Parties:**

DPW

**Description:**

The Town of Stratham will implement the following street and parking lot sweeping procedures to reduce the discharge of pollutants from the MS4:

- All streets with the exception of rural uncurbed roads with no catch basins or high-speed limited access highways will be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding).
- More frequent sweeping will be considered for targeted areas based on pollutant load reduction potential, inspections, pollutant loads, catch basin cleaning or inspection results, land use, impaired waters, or other factors.
- More frequent sweeping is required for municipally-owned streets and parking lots in areas that discharge to certain nutrient-impaired waters. Sweeping must be performed in these areas a minimum of two times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (Sept 1 – Dec 1; following leaf fall)
- For rural uncurbed roadways with no catch basins and limited access highways, the Town of Stratham will either meet the minimum frequencies above, or develop and implement an inspection, documentation, and targeted sweeping plan outlining reduced frequencies within two (2) year of the effective date of the permit and submit such plan with its year one annual report.
- The following information will be included in each annual report:
  - Number of miles cleaned, or the volume or mass of material removed

**Measurable Goal(s):**

Annually sweep 100% of all streets and municipal parking lots in accordance with the schedule listed above.

### **BMP: Winter Road Maintenance Program**

**Written Document Completed** (by year 1) ☒

**Document Name and/or Web Address:**

Process is outlined in this SWMP document.

**Responsible Department/Parties:**

DPW

**Description:**

The Town of Stratham will implement the following winter maintenance procedures to reduce the discharge of pollutants from the MS4:

- Minimize the use and optimize the application of sodium chloride and other salt (while maintaining public safety) and consider opportunities for use of alternative materials.
- Optimize sand and/or chemical application rates through the use, where practicable, of automated application equipment (e.g., zero velocity spreaders), anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals. Maintain records of the application of sand, anti-



icing and/or de-icing chemicals to document the reduction of chemicals to meet established goals.

- Prevent exposure of deicing product (salt, sand, or alternative products) storage piles to precipitation by enclosing or covering the storage piles. Implement good housekeeping, diversions, containment or other measures to minimize exposure resulting from adding to or removing materials from the pile. Store piles in such a manner as not to impact surface water resources, groundwater resources, recharge areas, and wells
- Provide training for municipal employees on winter roadway maintenance procedures.

**Measurable Goal(s):** Evaluate at least one salt/chloride alternative for use in the municipality.

**BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures**

**Written Document Completed** (by year 1) ☒

**Document Name and/or Web Address:**

Process is outlined in this SWMP document.

**Responsible Department/Parties:**

DPW

**Description:**

Structural stormwater BMPs will be inspected annually at a minimum and maintained as needed.

**Measurable Goal(s):** Inspect and Maintain 100% of treatment structures to ensure property function.

**BMP: SWPPP**

**Written Document Completed** (by year 2) ☒

**Document Name and/or Web Address:**

<https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

**Responsible Department/Parties:**

DPW

**Description:**

Develop and implement a SWPPP for all municipally owned or operated facilities in accordance with Section 2.3.7.2 of the MS4 permit.

**Measurable Goal(s):** Develop and implement SWPPP's for 100% of municipally owned facilities. SWPPPs prepared for Public Works Garage and Town Transfer Station (above link)

# Annual Evaluation

## Year 1 Annual Report

Document Name and/or Web Address:

Will be posted on the EPA website. <https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

## Year 2 Annual Report

Document Name and/or Web Address:

Will be posted on the EPA website. Link to website to be included once completed.

## Year 3 Annual Report

Document Name and/or Web Address:

Will be posted on the EPA website. Link to website to be included once completed.

## Year 4 Annual Report

Document Name and/or Web Address: TBD

Will be posted on the EPA website. Link to website to be included once completed.

## Year 5 Annual Report

Document Name and/or Web Address: TBD

Will be posted on the EPA website. Link to website to be included once completed.

## Year X Annual Report

Document Name and/or Web Address: TBD

Will be posted on the EPA website. Link to website to be included once completed.

## **TMDLs and Water Quality Limited Waters**

# Bacteria/Pathogens

## Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies) as listed in Appendix F of the MS4 permit and provided in the most recent approved list of impaired waterbodies.	TMDL/Impairment Name (if applicable)
NHEST600030904-02	Enterococcus
NHEST600030806-01-02	Enterococcus
NHRIV600030806-04	E. Coli
NHRIV600030806-14	E. Coli

### Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking (see IDDE Plan for ranking)

Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate as outlined in this SWMP

# Phosphorus Impairment

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
N/A	
N/A	
N/A	

## Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking (see IDDE Plan for ranking).

Distribute an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers as outlined in this SWMP.

Distribute an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate as outlined in this SWMP.

Distribute an annual message in the encouraging the proper disposal of leaf litter as outlined in this SWMP.

Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall) as outlined in this plan.

Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs to reduce phosphorus discharges.

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the phosphorus removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in pass per year by the BMP in each annual report.

### Requirements Due by Year 2

The requirement for adoption/amendment of the permittee's ordinance or other regulatory mechanism shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for phosphorus removal.

### Requirements Due by Year 4

Complete a Phosphorus Source Identification Report.

The document name (if attached) and/or web address is/are: TBD

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs that infiltrate stormwater where feasible.

### Requirements Due by Year 5

Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.d.ii or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries.

Complete a listing of planned structural BMPs and a plan and schedule for implementation.

# Nitrogen Impairment

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
NHEST600030806-01-02	Nitrogen
NHEST600030904-02	Nitrogen

## Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking (See IDDE Plan for ranking).

Distribute an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers as outlined in this SWMP.

Distribute an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate as outlined in this SWMP.

Distribute an annual message encouraging the proper disposal of leaf litter as outlined in this SWMP.

Establish requirements for the use of slow release fertilizers on permittee owned property currently using fertilizer, in addition to reducing and managing fertilizer use as provided in part 2.3.7.1.

Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.

Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall) as included in this SWMP.

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the nitrogen removal by the BMP consistent with Attachment 1 to Appendix H.

## Requirements Due by Year 2

The requirement for adoption/amendment of the permittee's ordinance or other regulatory mechanism shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for nitrogen removal.

## Requirements Due by Year 4

Complete a Nitrogen Source Identification Report.

The document name (if attached) and/or web address is/are: TBD

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs to reduce nitrogen discharges.

Requirements Due by Year 5

Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.d.ii or identified in the Nitrogen Source Identification Report that are within the drainage area of the impaired water or its tributaries.

Complete a listing of planned structural BMPs and a plan and schedule for implementation.



# Solids, Oil and Grease (Hydrocarbons), or Metals Impairments

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
N/A	
N/A	
N/A	

## Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking (See IDDE Plan for ranking).

Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads as prescribed by this SWMP.

Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings as prescribed by this SWMP.

## Requirements Due by Year 2

Stormwater management systems designed on commercial and industrial land use area draining to the water quality limited water body shall incorporate designs that allow for shutdown and containment where appropriate to isolate the system in the event of an emergency spill or other unexpected event.

# Lake and Pond Phosphorus TMDL

Applicable Receiving Waterbody(ies)	PCP Complete	TMDL/Impairment Name (if applicable)
N/A	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	

# Chloride Impairment

Applicable Receiving Waterbody(ies)	<del>TMDL</del> /Impairment Name (if applicable)
NHRIV600030806-04	Chloride

## Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking (See IDDE Plan for ranking).

## Requirements Due by Year 3

Develop a Salt Reduction Plan.

## Requirements Due by Year 4

Continue implementation of the Salt Reduction Plan.

## Requirements Due by Year 5

Fully implement the Salt Reduction Plan.

## Chloride TMDL

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
NHRIV600030806-04	Chloride

### Annual Requirements Beginning Year 1

Develop and implement a Chloride Reduction Plan.